

CLAIMS

WHAT IS CLAIMED IS:

1. A method for compressing 4D image data to accelerate the visualization of said data comprising the sequential steps of:
 - a. compressing a first 3D image using run length encoding (RLE);
 - b. detecting changes between said first 3D image and subsequent time varied 3D images by dividing each subsequent time varying 3D image into a plurality of sub-volume voxels and performing a chi-squared test on corresponding said voxels contained in each subsequent time varying 3D image and said sub-volume voxels in which was last detected a change; and
 - c. compressing the data of each, subsequent successive time varying 3D image using run-length encoding.
2. The method of claim 1 wherein the chi-squared threshold value is set to .95.
3. The method of claim 2 wherein the compressing of data using run-length encoding is only performed on the voxels in which change was detected.